

We claim:

1. A monitoring system for the detection of obstacles and persons comprising at least one video camera and at least one escalator and/or moving walk, characterized in that the monitoring system acquires stereoscopic images.
5
2. The monitoring system according to claim 1, characterized in that the video cameras are located above the escalator and/or moving walk.
10
3. The monitoring system according to claim 1, characterized in that the video cameras are located in a balustrade of the escalator and/or moving walk.
15
4. The monitoring system according to claims 1, 2 or 3, characterized in that more than one pair of video cameras are arranged along the escalator and/or moving walk to monitor a full length of the escalator and/or moving walk.
20
5. Monitoring system according to claims 1, 2 or 3, characterized in that, the monitoring system further comprises a processing unit for processing the stereoscopic images.
25
6. The monitoring system according to claim 5, characterized in that, the monitoring system further comprises at least one of a means for linking the video cameras with the processing unit, in the form of a data exchange bus, and a means for storing the stereoscopic images.
30
7. The monitoring system according to claim 5, characterized in that the processing unit comprises at least one personal computer loaded with an image processing software program for comparing digital data of a model image with data of an actual acquired image.
35
8. The monitoring system according to claim 5, characterized in that, the processing unit is integrated with at least one camera.
9. The monitoring system according to claim 5, characterized in that, the monitoring system is connected electrically to a control for restarting the escalator and/or moving walk after a stop only when no obstacle and/or person is detected on the escalator and/or moving walk.
35

10. A computer program product for the detection of obstacles and/or persons on escalators and/or moving walks, characterized in that the computer program product loads in a processor and processes stereoscopic images of the escalator and/or moving walk.

5

11. The computer program product according to claim 10, characterized in that the computer program product includes means to restart the escalator and/or moving walk after a stop only when no obstacle and/or person is detected on the escalator and/or moving walk.

10

12. A method for the detection of obstacles and persons on escalators and/or moving walks, comprising the steps of acquiring stereoscopic images of an escalator and/or moving walk by at least one video camera and processing the images of a processing unit

15

13. The method according to claim 11, further comprising the steps of restarting the escalator and/or moving walk automatically after a stop only when no obstacle and/or person is detected on the escalator and/or moving walk.

20